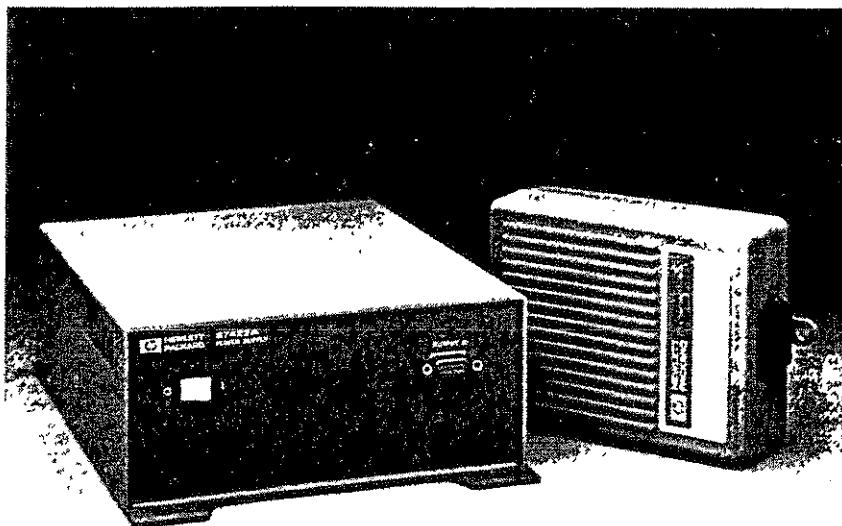


# HP 87421A HP 87422A Power Supply

## Technical Data



The HP 87421A and 87422A Power Supplies are universal input, dc switching power supplies designed to provide the bias voltages needed to operate HP Microwave System Amplifiers.

These compact power supplies are ideal for integration into a system or for use on a benchtop. The 2 meter dc bias cable permits the amplifier to be remotely located, allowing it to be placed out of the way or where space is not critical.

The HP 87421A is a 25 watt,  $\pm 12V$  dc power supply designed to power the HP 83006A, 83017A, 83018A, and 87415A Microwave System Amplifiers. A 2 meter cable is included for direct connection to the amplifier.

The HP 87422A is a 90 watt,  $\pm 15V$  dc power supply designed to power the HP 83020A Microwave System Power Amplifier. One additional  $\pm 12V$  dc output is provided to power a preamp such as the HP 83006A or 83017A.

- Designed specifically for HP Microwave System Amplifiers
- Bias cable permits remote placement
- Compact size for easy system integration

Included with the power supply are the necessary 2 meter cables to connect to the amplifier.

The HP 87421A may also be used to provide bias voltages for the HP 83440C High Speed Lightwave Converter. Using the HP 83440-60009 Lightwave Converter Power Supply Adapter, the HP 87421A becomes a compact, convenient power supply for use with the Lightwave Converter.

### Hewlett-Packard to Agilent Technologies Transition

This documentation supports a product that previously shipped under the Hewlett-Packard company brand name. The brand name has now been changed to Agilent Technologies. The two products are functionally identical, only our name has changed. The document still includes references to Hewlett-Packard products, some of which have been transitioned to Agilent Technologies.

### Transition de Hewlett-Packard vers Agilent Technologies

La présente documentation se réfère à un produit qui était auparavant livré sous la marque Hewlett-Packard. Cette marque a été remplacée par Agilent Technologies. D'un point de vue fonctionnel, les deux produits sont identiques et seuls leurs noms les différencient. La documentation comprend toujours des références aux produits Hewlett-Packard, même si certains possèdent déjà l'appellation Agilent Technologies.

### Umbenennung Hewlett-Packard in Agilent Technologies

Diese Dokumentation gehört zu einem Produkt, das früher unter dem Markennamen Hewlett-Packard ausgeliefert wurde. Der Markenname lautet in der Zwischenzeit Agilent Technologies. Die Funktionalität der beiden Produkte ist identisch, nur der Name hat sich geändert. Im Dokument wird zum Teil immer noch auf Hewlett-Packard verwiesen. An anderer Stelle wurde die Marke in Agilent Technologies umbenannt.

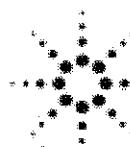
### Hewlett-Packard e la transizione ad Agilent Technologies

La presente documentazione è fornita a supporto di un prodotto che in precedenza veniva commercializzato con il marchio Hewlett-Packard. Tale marchio è stato trasformato in Agilent Technologies. I due prodotti sono identici dal punto di vista funzionale; il cambiamento ha riguardato soltanto il nome della società. Nella documentazione sono ancora presenti riferimenti ai prodotti Hewlett-Packard, alcuni dei quali tuttavia sono passati sotto il marchio Agilent Technologies.

### Transición de Hewlett-Packard a Agilent Technologies

Esta documentación proporciona información técnica sobre un producto que anteriormente se distribuía bajo el nombre de marca de la compañía Hewlett-Packard. Dicho nombre de marca ha cambiado ahora a Agilent Technologies. Los dos productos son funcionalmente idénticos, sólo ha cambiado nuestro nombre. Este documento aún incluye referencias a productos de Hewlett-Packard, algunos de los cuales han pasado a Agilent Technologies.

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**Agilent Technologies**

## Изменение торговой марки Hewlett-Packard на Agilent Technologies

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## Hewlett-PackardからAgilent Technologiesへの移行

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## 关于惠普公司更名为安捷伦科技公司的事宜

此文档支持先前以惠普公司 (Hewlett-Packard) 商标名称交付的产品。此商标名称现已更名为安捷伦科技公司 (Agilent Technologies)。两个商标名称的产品在功能上完全相同，只是更改了名称。文档中仍然会提到惠普产品，但其中一些产品名称已改为安捷伦科技公司。

## 關於惠普公司更名為安捷倫科技事宜

本資料支持先前以惠普公司 (Hewlett-Packard) 品牌交付的產品，而該品牌現已改名為安捷倫科技 (Agilent Technologies)。兩個品牌的產品功能相同，僅名稱更換而已。本資料仍含有惠普公司產品參數，但其中的一些產品名稱已改為安捷倫科技。

## Product Specifications

Model Number	HP 87421A	HP 87422A
Output Voltage/Current	+12V at 2 A -12V at 200 mA	+15V at 4.0 A -15V at 200 mA +12V at 2 A -12V at 200 mA
Output Power	25 W	90 W
Line Regulation	0.1 %	0.1 %
Load Regulation (20 % to full load)	2.0 %	1.0 %
Output Ripple	25 mV RMS max	25 mV RMS max
Output Noise	2 % peak to peak max	2 % peak to peak max
Overvoltage Limit Protected	Yes	Yes
Short Circuit Protection	Current limited for overload and short circuit protection. Normal operation returns upon removal of overload.	Current limited for overload and short circuit protection. Normal operation returns upon removal of overload.

### General Specifications

AC Input Voltage	90–250 VAC, 50/60 Hz	90–240 VAC, 50/60 Hz
Fuse	1 A, slow blow	T 3.15 A
Weight	0.9 kg (2.0 lb)	2.1 kg (4.6 lb)
Shipping Weight	1.8 kg (4.0 lb)	3.2 kg (7.0 lb)

### Environmental Specifications

Operating Temperature	0° to +55°C full load	0° to +55°C full load
Storage Temperature	-40° to +70°C	-40° to +70°C

### Product Safety

CAN/CSA 234	CAN/CSA 234
IEC 1010	IEC 1010
UL 1950	UL 1950

## Other Product and Operating Information

Operation of the power supplies involves connecting the power supplies output to the amplifier dc input with the cable provided. The power supplies include a power cord with protective ground for connection to 90-240 VAC.

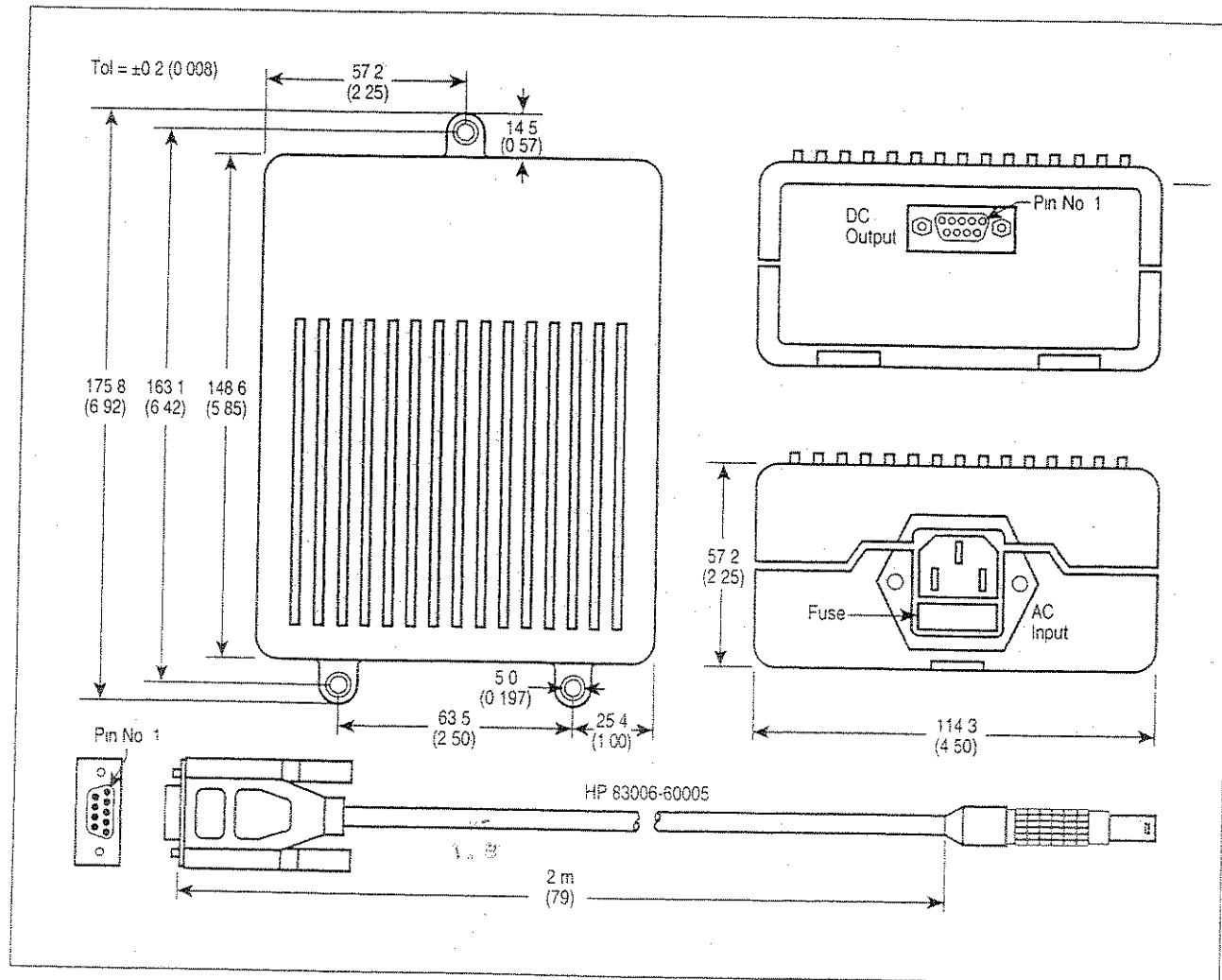
Mounting holes are provided as shown in the outline drawings. The power supplies may be mounted in any orientation with user supplied hardware.

To ensure continued compliance to product safety and EMC specifications, connect the power supplies to an amplifier only with the cable provided. Do not attempt to modify or extend the dc output cable. Contact your local Hewlett-Packard Sales Office for help with special applications requiring longer cables.

The power supplies have a fuse located next to the IEC appliance inlet. If it is necessary to replace

the fuse, disconnect the power supply from both AC power and the amplifier. Using a slotted screw driver, open the fuse cover and replace the fuse.

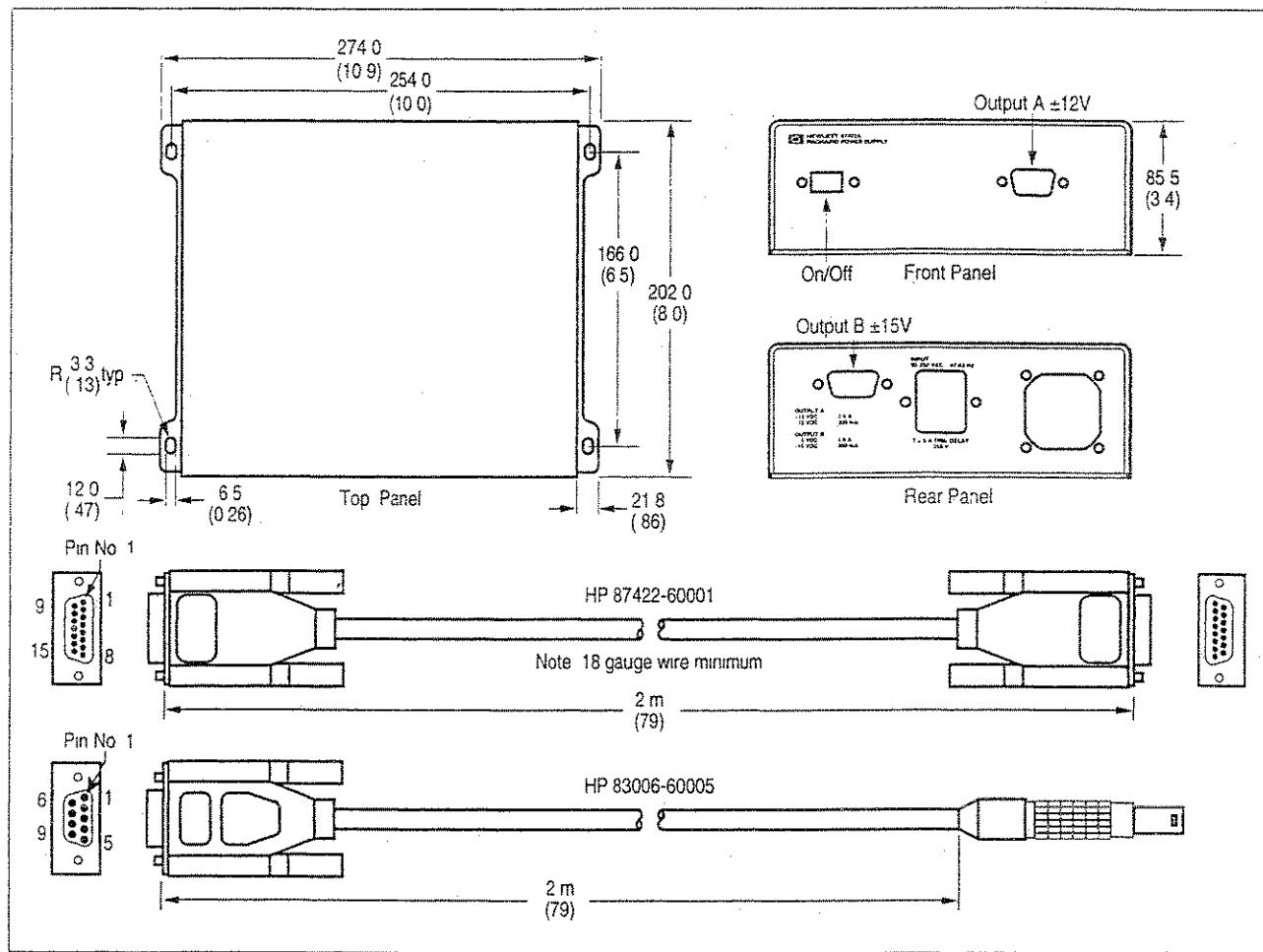
The power supplies contain no user serviceable parts (with the exception of the fuse). If service is required, please contact your Hewlett-Packard Sales Office or nearest Hewlett-Packard Service Center.



The HP 83191A Power Supply includes

HP 83006A, 83017A, and 83018A. The power supply comes with a 2 meter long cable to allow easy connection between the amplifier and the power supply. Dimensions in millimeters and (inches).

## Ordering Information



### HP 87421A Power Supply

Includes power supply, AC power cord, and HP part number 83006-60005, which is a 2 meter cable with a 3-pin connector on one end and a D-subminiature connector on the other end for direct connection to the HP 83006A, 83017A, 83018A, and 87415A Microwave System Amplifiers.

### HP 87422A Power Supply

Includes power supply and HP part number 83020-60001, which is a 2 meter cable with 15-pin connectors for direct connection

additional dc output is provided to supply power to a preamplifier such as the HP 83006A or 83017A.

### Other Instruments and Accessories

HP 83006A Microwave System Amplifier 0.01–26.5 GHz

HP 83017A Microwave System Amplifier 0.5–26.5 GHz

HP 83018A Microwave System Amplifier 2–26.5 GHz

HP 83020A Microwave System Power Amplifier 2–26.5 GHz

HP 87415A Microwave System Amplifier 2–8 GHz

HP 83440C High Speed

dc–20 GHz, 1000–1600 nm

HP 83440-60009 Lightwave Converter Power Supply Adapter

The HP 87422A Power Supply provides the dc power needed to bias the HP 83020A. DC cables shown above shipped with power supply. Dimensions in millimeters and (inches).

For more information, call your local HP sales office listed in your telephone directory.